## **ABSTRACT**

The present invention relates to a cursor simulator and a simulation method thereof for using a limb image to control a cursor. The cursor simulator has a receiving module for receiving optical signals; a position corresponding module for corresponding the view scope to the display frame; a display module for finding out the position on the display frame, and displaying the optical signal on a simulation display frame; a specific area display module for marking a specific area; a limb image color parameter acquiring module for reading the color parameters in an area corresponding to the specific area; and a limb image forming module for reading the color parameters. When the color parameter is approximately equal to the limb image color parameter, the forming module will record the optical signal display position, and form a simulated limb image according to all of the recorded optical signal display positions.